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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,054	03/22/2001	Alfred B. Levine	01-003	2529

7590 10/19/2005

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EXAMINER

PAIK, STEVE S

ART UNIT PAPER NUMBER

2876

DATE MAILED: 10/19/2005

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/814,054  
Filing Date: March 22, 2001  
Appellant(s): LEVINE, ALFRED B.

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Alfred B. Levine  
For Appellant

**EXAMINER'S ANSWER**

**MAILED**

**OCT 19 2005**

**GROUP 2800**

This is in response to the appeal brief filed June 24, 2005 appealing from the Office action mailed May 26, 2005.

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**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

A substantially correct copy of appealed claims 51-68 appears on page 12 of the Appendix to the appellant's brief. The minor errors are as follows:

Claims 51, 53, 55-59, and 62-68 are objected to because of the following informalities:

Re claim 51: Please delete the second comma in line 8 on page 2.

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The words "said digital detecting means" in line 11 lack the antecedent basis. The examiner respectfully suggests amending them by --said detecting means --.

The word "being" is repeated in line 16 and superfluous.

The word "theyt" in line 17 is misspelled. The examiner suggests substituting it with --said two markings --.

Re claim 53: Please insert a space between the words "phaseof" in line 2 and delete a space before a comma in line 5.

Re claim 55: The word "dis[alced" in line 6 on page 4 appears to be -- discrete --.

The letter "o" in line needs to be deleted.

The word "vehucle" in line 17 is misspelled.

Re claim 56: The dependency is incorrect. It appears to be a dependent claim of claim 55. A correction is required if that's what applicant intends to claim.

Please delete extra spaces in front of commas on page 5 of the Amendment.

The word, "descrete" in line 3 on page 5 appears to be -- discrete--.

Re claim 57: The word "pproaches" is misspelled. It appears that the applicant meant to recite -- approaches --.

Re claim 58: The word "chooses" appears to be -- choose --.

Please delete extra spaces in front of commas on pages 6 and 7 of the Amendment.

"te" in line 1 of page 7 needs to be deleted.

Re claim 59: The word, "Said" needs to be written in lower case -- said --.

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Please delete extra spaces in front of commas on page 7 of the  
Amendment.

Re claim 62: Please delete the extra spaces between the words, “continually” and  
“advising” on page 8.

Please insert a space between “and the” in line 3 of page 9.

Replace the comma at the end of the claim with a period.

Re claim 63: Please delete extra spaces in front of commas on page 10 of the  
Amendment.

The word, “descrete” in line 7 on page 10 appears to be -- discrete--.

Re claim 64: The word, “descrete” in line 4 on page 11 appears to be -- discrete--.

Re claim 65: Please insert a space between the words “uncluttercommunications”.

Please delete a comma in front of the word, “said” in line 5 on page 11.

Please replace the word “twithout” with --without-- in line 6 on page 11.

Please insert a space between the words “ofvehicle” in line 6 on page 11.

The word, “descrete” in lines 3 and 7 on page 11 appears to be -- discrete--.

Re claim 66: Please delete extra space in front of comma in line 5 on page 12.

Re claim 67: Please delete extra spaces in front of commas on page 13.

The word, “descrete” in line 16 on page 13 appears to be -- discrete--.

Re claim 68: Please delete extra spaces between the words “a” and “map-free” on page  
14.

Please delete extra spaces in front of commas and a period on page 14 of  
the Amendment.

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**(8) Evidence Relied Upon**

5,587,911	Asano et al.	12-1996
6,208,932	Ohmura et al.	3-2001
5,682,030	Kubon	10-1997

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 51, 52, 55-65, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano (US 5,587,911) in view of Ohmura et al. (US 6,208,932). This rejection is set forth in the prior Office Action, Paper No. 6.

Regarding claims 51, 52, 55-65, 67 and 68, Asano discloses a navigation system for guiding a driver operated vehicle between two selected destinations. The system allows the driver to select an optimum path via a route change option shown in Fig. 7a. The route change key 64 is an input device which is for changing the entire route indicated, namely for commanding a re-search based on the driver's preference. The route information key 65 gives an option to a user to select route information of his/her preferences. The display can present a map with changeable scales and the names of roads on the course in a map-free format. The system comprises in a first phase, operating means for continuous visual guiding of a vehicle from a zone area of its present location (present position mark in Fig. 4) to a zone area (destination mark) of a selected destination, the operating means visually displaying (map-free route in Fig. 4 and 5) representations of the two zone areas, with the displacement between the two zone areas

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being representative of the distance between the two zone areas for the vehicle to follow to reach the selected destination,

detecting means (present position detector, col. 5, ll. 45-48) within the vehicle for continually detecting the present location of the vehicle within different distant zones of a city, town, or other geographic area with reference to the end zone (destination in Fig. 4) of selected specific distant destination as the vehicle proceeds toward the end zone of the destination. The system further comprises visual display means energized by the detector means to continually display (present position 70 in Fig. 7b) only the changeable zone location of the vehicle and display the fixed end zone location of the specific destination, and localized navigation means (peripheral map) energizing the visual display (Fig. 7c and 12) when the vehicle reaches the fixed end destination zone, to display the streets, roads and local addresses in the end destination zone to guide the vehicle to the specific destination (Fig. 7b shows present position and the branching point with local addresses).

Although Asano discloses all the features of the claimed invention including a display means (visual/audible) to assist a driver as minimally distracted as possible, he does not explicitly disclose display is applied on the window which can be observed continually.

Ohmura et al. discloses in figure 1, a head-up display on a windshield outputting an image data related to a driver's driving condition and destination. This is an alternative way of outputting necessary information to the driver based on the driver's preference. If the driver just wants to get information in an audible fashion, he or she may disregard the visual display on a windshield. This feature undoubtedly allows the driver to pay his/her full attention on the road conditions and promotes safe driving of the vehicle.

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Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have utilized the head-up display, as taught by Ohmura, for the purpose of providing an additional option of receiving information from a navigation system since it is an obvious matter of design variation, well within the ordinary skill in the art, to optimize available techniques of outputting information to a driver using a navigation system. Moreover, such modification could have been an art recognized functional equivalent in providing an output to a driver using a navigation system, per se.

Claims 53, 54 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano et al. (USP 5,587,911) as modified by Ohmura et al. (US 6,208,932) as applied to claims 51, 52 and 63 above, and further in view of Kubon (US 5,682,030).

Re claims 53, 54 and 66, the teachings of Asano in view of Ohmura et al. have been discussed above. Asano in view of Ohmura discloses a navigation system including all of the features of claimed invention with the exception of a plurality of fixed road signs bearing coded information and detecting said coded information.

Kubon shows an automobile navigations system (including a code reader camera 1601) and a road sign (1612) bearing a bar code (1613). The particular bar code may be chosen to correspond to the information printed on the road sign (1612), such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information etc (these may be considered as traffic control information). In another situation, the user may, based on prior information concerning the trip route, set the system (navigation system) with the user's desired route. If the system decodes a bar code (1613) from a passing road sign (1612), which should not have been encountered, based upon the preset route, the system may notify the



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user that the user is no longer on the course. Alternatively, based upon the bar codes (1613) decoded from the road signs (1612), the system may give periodic indications to the user as to upcoming exits, turns, etc. (col. 20, ll. 55-62). The bar coded road signs provide exact present location information to the user and check if the user stays on the course. Furthermore, since the bar code may include other useful information such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information to a user, the user can plan his trip with increased efficiency.

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have combined the automobile navigation system reading a plurality of bar coded road signs, as taught by Kubon with the navigation system of Asano in view of Ohmura for the purpose of providing additional helpful information such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information and ensuring the users' staying on the predetermined trip route. Such combination provides a user a peace of mind while traveling and assists the user managing time and resources for his trip more efficiently.

#### **(10) Response to Argument**

The examiner respectfully disagrees with the appellant's comments and arguments as stated in the "Argument" section of the Appeal Brief, for the following reasons:

The Appellant contends that Asano patent discloses a system that always computes or re-computes the guidance route and the driver can never select the route to be followed and receive guidance from the system. The Examiner has noted the argument and fully considered and interpreted the claims as reasonably as possible within a broader perspective. After reviewing

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the prior arts of the record and analyzing the claims, the Examiner believes that the prior arts still read on the recited limitations of claims presented in the present application.

The system of Asano allows a driver to select an optimum path via a route change option shown in Fig. 7a. Furthermore, figs. 4 and 5 show examples of different formats for output of route information. The figures 4, 5, and 7a clearly show that the driver can select different routes based on his/her needs with a desired output format. For example, Asano discloses a format for output of route information showing only two locations, a present position and a destination.

The Examiner interprets that all navigation system has to incorporate a step of computation. It may be computing/calculating a distance between two locations, a total estimated travel time it may take, or estimated fuel consumption, etc. Therefore, the navigation system is a computing system. For that reason, the preamble was not given a patentable weight.

The Appellant further states that all of the claims in the first group of broadest claims define a navigation system wherein the vehicle is guided by heading direction alone using a single display or communication consisting of only two dots or markings on the screen.

As stated above, the system of Asano allows a driver to select an optimum path and an s output format of his/her choice. The system of Asano believes to be capable of providing the functions recited in the claims and a few more.

The second group of claims specifies heads-up display (HUD). The Examiner has applied the teachings of Ohmura et al. as evidence to the claims. The Appellant argues that the combination of the teachings Asano et al. and Ohmura et al. is not workable, practical, safe, or obvious. As stated above, Asano et al. provide many different formats for output of route information. If a driver is concerned about possibility of a situation which he/she cannot fully

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focus on the road ahead because of information displayed on a display of navigation system, the driver may choose the simplest format for output of route information along with voice guidance and HUD. The Examiner believes the teachings of Asano et al. and Ohmura et al. are obvious and combinable

The third group of claims specifies a digital sensor for reading digital codes. The Examiner has combined the teachings Asano et al. and Ohmura et al. further in view of Kubon.

Kubon shows an automobile navigations system (including a code reader camera 1601) and a road sign (1612) bearing a bar code (1613). The particular bar code may be chosen to correspond to the information printed on the road sign (1612), such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information etc (these may be considered as traffic control information). In another situation, the user may, based on prior information concerning the trip route, set the system (navigation system) with the user's desired route. If the system decodes a bar code (1613) from a passing road sign (1612), which should not have been encountered, based upon the preset route, the system may notify the user that the user is no longer on the course. Alternatively, based upon the bar codes (1613) decoded from the road signs (1612), the system may give periodic indications to the user as to upcoming exits, turns, etc. (col. 20, ll. 55-62). The bar coded road signs provide exact present location information to the user and check if the user stays on the course. Furthermore, since the bar code may include other useful information such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information to a user, the user can plan his trip with increased efficiency.

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Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to have combined the automobile navigation system reading a plurality of bar coded road signs, as taught by Kubon with the navigation system of Asano in view of Ohmura for the purpose of providing additional helpful information such as mileage distance to the next town, speed limit information, upcoming exit information, gas station and hotel information and ensuring the users' staying on the predetermined trip route. Such combination provides a user a peace of mind while traveling and assists the user managing time and resources for his trip more efficiently.

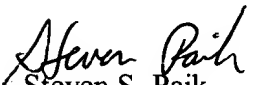
For the reasons and discussions stated above, it is believed that the rejections should be sustained.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

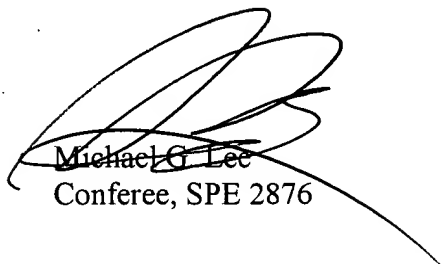
Respectfully submitted,

  
Steven S. Paik  
Primary Examiner  
Art Unit 2876


ssp  
September 28, 2005

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Conferees:



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